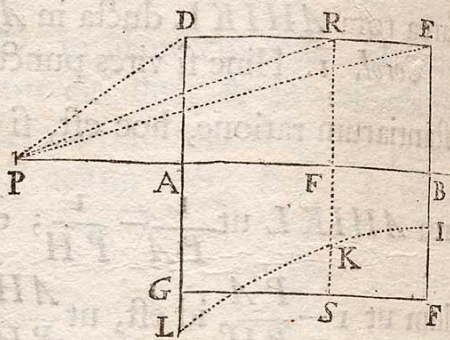


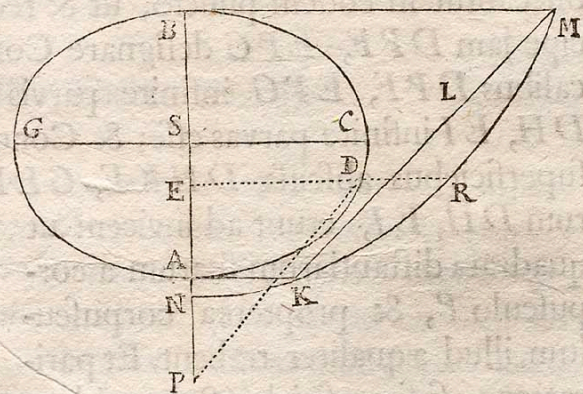
In solidum  $ADEFG$  trahatur corpusculum  $P$ , situm in ejus axe  $AB$ . Circulo quolibet  $RFS$  ad hunc axem perpendiculari secetur hoc solidum, & in ejus diametro  $FS$ , in plano aliquo  $PALKB$  per axem transeunte, capiatur (per Prop. XC.) longitudo  $FK$  vi qua corpusculum  $P$  in circulum illum attrahitur proportionalis. Tangat autem punctum  $K$  curvam lineam  $LKI$ , planis extimorum circulorum  $AL$  &  $BI$  occurrentem in  $A$  &  $B$ ; & erit attractio corpusculi  $P$  in solidum ut area  $LABI$ . Q. E. D.



*Corol. 1.* Unde si solidum Cylindrus sit, parallelogrammo  $ADEB$  circa axem  $AB$  revolutus descriptus, & vires centripetæ in singula ejus puncta tendentes sint reciproce ut quadrata distantiarum a punctis: erit attractio corpusculi  $P$  in hunc Cylindrum ut  $BA - PE + PD$ . Nam ordinatim applicata  $FK$  (per Corol. 1. Prop. XC.) erit ut  $1 - \frac{PF}{PR}$ . Hujus pars 1 ducta in longitudinem  $AB$ , describit aream  $1 \times AB$ ; & pars altera  $\frac{PF}{PR}$  ducta in longitudinem  $PB$ , describit aream  $1$  in  $PE - AD$  (id quod ex curvæ  $LKI$  quadratura facile ostendi potest: ) & similiter pars eadem ducta in longitudinem  $PA$  describit aream  $1$  in  $PD - AD$ , ductaq; in ipsarum  $PB$ ,  $PA$  differentiam  $AB$  describit arearum differentiam  $1$  in  $PE - PD$ . De contento primo  $1 \times AB$  auferatur contentum postremum  $1$  in  $PE - PD$ , & restabit area  $LABI$  æqualis  $1$  in  $AB - PE + PD$ . Ergo vis huic areæ proportionalis est ut  $AB - PE + PD$ .

*Corol. 2.* Hinc etiam vis innotescit qua Sphærois  $AGBCD$  attra-

trahit corpus quodvis  $P$ , exterius in axe suo  $AB$  situm. Sit  $NK-RM$  Sectio Conica cujus ordinatim applicata  $ER$ , ipsi  $PE$  perpendicularis, æquetur semper longitudini  $PD$ , quæ ducitur ad punctum illud  $D$ , in quo applicata ista Sphæroidem secat. A Sphæroidis verticibus  $A$ ,  $B$  ad ejus axem  $AB$  erigantur perpendiculara  $AK$ ,  $BM$  ipsis

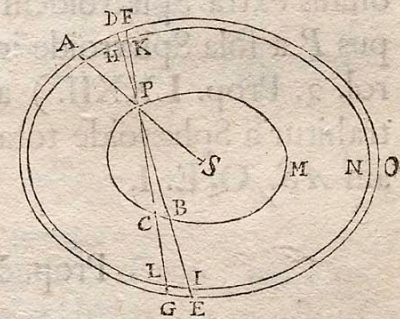


$AP$ ,  $BP$  æqualia respective, & propterea Sectioni Conicæ occurrentia in  $K$  &  $M$ ; & jungantur  $KM$  auferens ab eadem segmentum  $KM-RK$ . Sit autem Sphæroidis centrum  $S$  & semidiameter maxima  $SC$ : & vis qua Sphærois tra-

hit corpus  $P$  erit ad vim qua Sphæra, diametro  $AB$  descripta, trahit idem corpus, ut  $\frac{AS \times CSq. - PS \times KMRK}{PSq. + CSq. - ASq.}$  ad  $\frac{AS cub.}{3 PSquad.}$ .

Et eodem computando fundamento invenire licet vires segmentorum Sphæroidis.

*Corol. 3.* Quod si corpusculum intra Sphæroidem in data quavis ejusdem diametro collocetur; attractio erit ut ipsius distantia a centro. Id quod facilius colligetur hoc argumento. Sit  $AGOF$  Sphærois attrahens,  $S$  centrum ejus &  $P$  corpus attractum. Per corpus illud  $P$  agantur tum semidiameter  $SPA$ , tum rectæ duæ quævis  $DE$ ,  $FG$  Sphæroidi hinc inde occurrentes in  $D$  &



$E$ ,  $F$  &  $G$ : Sintq;  $PCM$ ,  $HLN$  superficies Sphæroidum duarum interiorum, exteriori similium & concentricarum, quarum prior tran-